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 WISE (TM)  
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Release 2.1D John F. Collins, Biocomputing Research Unit.  
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MPsrch\_p protein - protein database search, using Smith-Waterman algorithm  
 on: Wed Aug 20 09:42:15 1997; MasPar time 18.26 Seconds  
 Modular output not generated. 634.466 Million cell updates/sec

Title: >US-08-469-637A-2  
 Description: (1-401) from US08469637A.pep (1 of 2)  
 Perfect Score: 3030  
 Sequence: 1 MNKLCCALVFLDISIKWT.....QKLFLEMIGNQVSVKISCL 401

Scoring table: PAM 150  
 GAP 11

Searched: 91006 segs, 28888923 residues

Post-processing: Minimum Match 0%  
 Listing first 45 summaries

Database: p151

1:ann1 2:ann2 3:ann3 4:ann4 5:unann1 6:unann2 7:unann3  
 8:unann4 9:unann5 10:unann6 11:unann7 12:unann8  
 13:unann9 14:unann10 15:unann16:unannrev

Statistics: Mean 46.537; Variance 102.690; scale 0.453

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description	Pred. No.
1	398	13.1	451	6	A35356 tumor necrosis facto	3.16e-47
2	377	12.4	459	14	I48854 gene murine tumour n	1.46e-43
3	375	12.4	474	6	B38634 tumor necrosis facto	3.24e-43
4	303	10.0	277	13	A60771 B-cell activation pr	6.84e-31
5	294	9.7	289	14	A46515 B cell-associated su	2.21e-29
6	294	9.7	305	14	A46476 CD40 - mouse	2.21e-29
7	269	8.9	326	2	GOVZML T2 protein - myxoma	3.14e-25
8	260	8.6	335	6	B43692 tumor necrosis facto	9.43e-24
9	260	8.6	435	13	I54182 tumor necrosis facto	2.20e-19
10	233	7.7	349	8	D36858 G4R protein - variol	6.62e-19
11	230	7.6	138	16	S32385 gene G4R protein - v	1.77e-17
12	221	7.3	454	14	I57826 tumor necrosis facto	1.77e-17
13	221	7.3	454	2	GOMST1 tumor necrosis facto	1.77e-17
14	220	7.3	461	2	GOMRT1 tumor necrosis facto	2.54e-17
15	215	7.1	416	6	JN0006 nerve growth factor	1.55e-16
16	213	7.0	427	2	GOH0N nerve growth factor	3.20e-16
17	207	6.8	425	6	A26431 nerve growth factor	2.75e-15
18	186	6.1	461	14	JC4302 tumor necrosis facto	4.49e-12
19	178	5.9	453	13	A42086 CD30 antigen precurs	7.07e-11
20	172	5.7	455	2	GOHUT1 tumor necrosis facto	5.44e-10
21	162	5.3	260	2	A46517 CD27 antigen precurs	1.55e-08

22	159	5.2	256	14	B32393	T-cell antigen 4-1BB
23	154	5.1	324	14	JC2395	Fas antigen - rat
24	146	4.8	271	14	S12783	Ox40 antigen precurs
25	144	4.8	272	14	I48700	gene ox40 protein -
26	141	4.7	255	13	JT0752	lymphocyte activatio
27	140	4.6	335	13	A38142	Apo-1 antigen, Fas a
28	137	4.5	327	14	A46484	apoptosis-mediated
29	134	4.4	250	2	A49053	CD27 antigen precurs
30	134	4.4	314	13	I37383	FAS soluble protein
31	134	4.4	335	14	A40036	apoptosis-mediated
32	124	4.1	103	8	JQ1791	Salp16r protein - va
33	124	4.1	103	8	A42523	A53R protein - vacci
34	115	3.8	360	11	S48365	hypothetical protein
35	110	3.6	535	11	B34576	D2 protein precursor
36	105	3.5	2813	3	VWHD	von Willebrand facto
37	103	3.4	344	11	S61037	hypothetical protein
38	104	3.4	614	12	S43427	intermediate filamen
39	102	3.4	3084	4	MMMSA	laminin chain A prec
40	100	3.3	132	13	S57566	Fas/Apo-1/CD95 prote
41	100	3.3	149	13	S58662	Fas-Delta-(4,7) prot
42	101	3.3	713	11	JC6012	glutamine--fructose-
43	101	3.3	1122	12	S64443	probable membrane pr
44	100	3.3	2677	13	A38194	desmoplakin I - huma
45	98	3.2	1947	3	S05697	myosin heavy chain C

## ALIGNMENTS

RESULT	ENTRY	1	ALIGNMENTS
ENTRY	A35356	#type complete	
TITLE	tumor necrosis factor receptor type 2 precursor - human		
ALTERNATE_NAMES	75K tumor necrosis factor receptor		
ORGANISM	#formal_name Homo sapiens #common_name man		
DATE	14-Sep-1990 #sequence_revision 14-Sep-1990 #text_change 22-Nov-1996		
ACCESSIONS	A35356; A36475; A48416; A36007; A23666; B35010; I38094		
REFERENCE	A35356		
#authors	Smith, C.A.; Davis, T.; Anderson, D.; Sojani, L.; Beckmann, M.P.; Jerzy, R.; Dower, S.K.; Cosman, D.; Goodwin, R.G.		
#journal	Science (1990) 248:1019-1023		
#title	A receptor for tumor necrosis factor defines an unusual family of cellular and viral proteins.		
#cross-references	WTID:90260639		
#accession	A35356		
#status	Preliminary		
#molecule-type	mrna		
#residues	1-461 ##label SWI		
REFERENCE	A36475		
#authors	Kohn, T.; Brewer, M.T.; Baker, S.L.; Schwartz, P.E.; King, M.W.; Hale, K.K.; Squires, C.H.; Thompson, R.C.; Vannice, J.L.		
#journal	Proc. Natl. Acad. Sci. U.S.A. (1990) 87:8331-8335		
#title	A second tumor necrosis factor receptor gene product can shed a naturally occurring tumor necrosis factor inhibitor.		
#cross-references	WTID:91045991		
#accession	A36475		
#status	Preliminary		
#molecule-type	mrna		
#residues	1-195,'R',197-461 ##label KOH		
REFERENCE	A48416		
#authors	Dembic, Z.; Loetscher, H.; Gubler, U.; Pan, Y.C.; Ishii, H.W.; Gentz, R.; Brockhaus, M.; Lesslauer, W.		
#journal	Cytokine (1990) 2:231-237		
#title	Two human TNF receptors have similar extracellular, but distinct intracellular, domain sequences.		
#cross-references	WTID:91370690		
#accession	A48416		
#status	Preliminary		
#molecule-type	mrna; protein		
#residues	23-461 ##label DEM		
#cross-references	NCBIIN:63366; NCBIIN:63371		

```

sequence extracted from NCBI backbone
REFERENCE
#note
#authors Heller, R.A.; Song, K.; Onasch, M.A.; Fischer, W.H.; Chang, D.; Ringold, G.M.
#journal Proc. Natl. Acad. Sci. U.S.A. (1990) 87:6151-6155
#title Complementary DNA cloning of a receptor for tumor necrosis factor and demonstration of a shed form of the receptor.
#cross-references MIMD:90349572
#accession A36007
#status preliminary
#molecule_type mRNA
#residues 116-140,'P',142-195,'R',197-362,'T',364-461 ##label HEL
#cross-references GB:M35857
REFERENCE
#authors Loetscher, H.; Schlaefer, E.J.; Lahn, H.W.; Pan, Y.C.E.; Lesslauer, W.; Brockhaus, M.
#journal J. Biol. Chem. (1990) 265:20131-20138
#title Purification and partial amino acid sequence analysis of two distinct tumor necrosis factor receptors from H160 cells.
#cross-references MIMD:91056048
#accession A23666
#status preliminary
#molecule_type protein
#residues 23-40;65-69;136-141;300-306 ##label LOE
REFERENCE
#authors Engelmann, H.; Novick, D.; Wallach, D.
#journal J. Biol. Chem. (1990) 265:1531-1536
#title Two tumor necrosis factor-binding proteins purified from human urine. Evidence for immunological cross-reactivity with cell surface tumor necrosis factor receptors.
#cross-references MIMD:90110215
#accession B35010
#status preliminary
#molecule_type protein
#residues 27-31 ##label ENG
REFERENCE
#authors Kuhnert, P.; Kemper, O.; Wallach, D.
#journal Gene (1994) 150:381-386
#title Cloning, sequencing and partial functional characterization of the 5' region of the human p75 tumor necrosis factor receptor-encoding gene (TNF-R).
#cross-references MIMD:95121934
#accession I38094
#status preliminary; translated from GB/EMBL/DBJ
#molecule_type DNA
#residues 1-37 ##label RES
#cross-references EMBL:X80021; NID:g666044; CDS_PID:g825701
GENE
#name GDB:TNFR2
#cross-references GDB:125914
#map_position 1p36.2-1p36.2
#introns 26/3
CLASSIFICATION
#note the list of introns is incomplete
#superfamily tumor necrosis factor receptor type 2; NGF receptor repeat homology
#duplication; receptor; transmembrane protein
KEYWORDS
#domain signal sequence #status predicted #label SIG
#product tumor necrosis factor receptor type 2 #status experimental #label MATV
FEATURE
1-22 #domain NGF receptor repeat homology #label NG1\
23-416 #domain NGF receptor repeat homology #label NG2\
40-76 #domain NGF receptor repeat homology #label NG3\
78-119 #domain NGF receptor repeat homology #label NG4\
120-162 #domain transmembrane #status predicted #label TMN\
164-201 #domain intracellular #status predicted #label INN\
262-279 #binding_site carbohydrate (asn) (covalent) #status predicted
280-461
171-193
SUMMARY
#length 461 #molecular-weight 48291 #checksum 5724
Query Match 13.1%; Score 398; DB 6; Length 461;
Best Local Similarity 43.8%; Pred. 3; l6e-47;
Matches 63; Conservative 19; Mismatches 55; Indels 7; Gaps 6

```

Db	45	yddtla-gmcskspgahqvtctstsdvscdsstytlumwpeclascgrcsd	103
Oy	31	xdebtshoLDCRCPPTTYIKQHCtAKKtVCAPCPDHYTDSMHTSDECLCYSCVEL	90
Db	104	qvctactregatrlctcrpyayalaskgegcrlcaplrlkrpgfivaryptetsdvckp	163
Oy	91	QYVKOECHRTNHRVCECKEGRY--LEI-EFC-L-KH-RSCPGEFVGWAGTFERTVCKR	144
Db	164	capgtfntstldicrphqlcmv	187
Oy	145	CPEDFSNSTSKAPCRKHNTCSV	168
RESULT	2		
ENTRY		I48854 #type fragment	
TITLE		gene murine tumour necrosis factor receptor 2 protein - mouse	
ORGANISM		(fragment)	
DATE		#formal_name Mus musculus #common_name house mouse	
REFERENCE		02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change	
ACCESSIONS		02-Jul-1996	
AUTHORS		I48854	
JOURNAL		I48854	
TITLE		Powell, E.E.; Wicker, L.S.; Peterson, L.B.; Todd, J.A.; Mamm, Genome (1994) 5:726-727	
GENETICS		Alllelic variation of the type 2 tumor necrosis factor receptor gene.	
SUMMARY		#cross-references EMBL:X76401; NID:g433830; CDS_PID:g433831	
Query Match		gene name murine tumour necrosis factor receptor 2	
Best Local Similarity	12.4%; Score 377; DB 14; Length 459;		
Matches	66; Conservative 21; Mismatches 61; Indels 11; Gaps 7;		
Db	37	gmccakcpbggyrhfnkstdcvadcaeamtyqwngfriclcasscsdqetrac	96
Oy	38	QLLDCKPPIYLKQHCTARKWTVCACPDPHYTDSMHTSDECLCYSPVCKELQYVKEC	97
Db	97	tkggnrvacaagaycalchsgscqcmrlskcpgfigvaasrpbnvgvlckacaptlf	156
Oy	98	NRTNRNVCECKEGRY--LEIEF--CLKH-R-S-CPEGFEVWAGTRPNTVCKRPDDEF	150
Db	157	sdtstidvcprhlcsi--laip--gnastdavcapes	191
Oy	151	SNETSSKAPCRKHNTCSVFGLLTQKNATHDNICGS	189
RESULT	3		
ENTRY		B38634 #type complete	
TITLE		tumor necrosis factor receptor type 2 precursor - mouse	
ORGANISM		#formal_name Mus musculus #common_name house mouse	
DATE		30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change	
ACCESSIONS		18-Oct-1996	
REFERENCE		B38634; A40254; S54816	
AUTHORS		A38634	
JOURNAL		Lewis, M.; Tartaglia, L.A.; Lee, A.; Bennett, G.L.; Rice,	
TITLE		G.C.; Wong, G.H.W.; Chen, E.Y.; Goeddel, D.V.	
GENETICS		Proc. Natl. Acad. Sci. U.S.A. (1991) 88:2830-2834	
SUMMARY		Cloning and expression of cDNAs for two distinct murine tumor	
Query Match		necrosis factor receptors demonstrate one receptor is	
Best Local Similarity	12.4%; Score 377; DB 14; Length 459;		
Matches	66; Conservative 21; Mismatches 61; Indels 11; Gaps 7;		
Db	37	gmccakcpbggyrhfnkstdcvadcaeamtyqwngfriclcasscsdqetrac	96
Oy	38	QLLDCKPPIYLKQHCTARKWTVCACPDPHYTDSMHTSDECLCYSPVCKELQYVKEC	97
Db	97	tkggnrvacaagaycalchsgscqcmrlskcpgfigvaasrpbnvgvlckacaptlf	156
Oy	98	NRTNRNVCECKEGRY--LEIEF--CLKH-R-S-CPEGFEVWAGTRPNTVCKRPDDEF	150
Db	157	sdtstidvcprhlcsi--laip--gnastdavcapes	191
Oy	151	SNETSSKAPCRKHNTCSVFGLLTQKNATHDNICGS	189
RESULT	3		
ENTRY		B38634 #type complete	
TITLE		tumor necrosis factor receptor type 2 precursor - mouse	
ORGANISM		#formal_name Mus musculus #common_name house mouse	
DATE		30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change	
ACCESSIONS		18-Oct-1996	
REFERENCE		B38634; A40254; S54816	
AUTHORS		A38634	
JOURNAL		Lewis, M.; Tartaglia, L.A.; Lee, A.; Bennett, G.L.; Rice,	
TITLE		G.C.; Wong, G.H.W.; Chen, E.Y.; Goeddel, D.V.	
GENETICS		Proc. Natl. Acad. Sci. U.S.A. (1991) 88:2830-2834	
SUMMARY		Cloning and expression of cDNAs for two distinct murine tumor	
Query Match		necrosis factor receptors demonstrate one receptor is	
Best Local Similarity	12.4%; Score 377; DB 14; Length 459;		
Matches	66; Conservative 21; Mismatches 61; Indels 11; Gaps 7;		
Db	37	gmccakcpbggyrhfnkstdcvadcaeamtyqwngfriclcasscsdqetrac	96
Oy	38	QLLDCKPPIYLKQHCTARKWTVCACPDPHYTDSMHTSDECLCYSPVCKELQYVKEC	97
Db	97	tkggnrvacaagaycalchsgscqcmrlskcpgfigvaasrpbnvgvlckacaptlf	156
Oy	98	NRTNRNVCECKEGRY--LEIEF--CLKH-R-S-CPEGFEVWAGTRPNTVCKRPDDEF	150
Db	157	sdtstidvcprhlcsi--laip--gnastdavcapes	191
Oy	151	SNETSSKAPCRKHNTCSVFGLLTQKNATHDNICGS	189
RESULT	3		
ENTRY		B38634 #type complete	
TITLE		tumor necrosis factor receptor type 2 precursor - mouse	
ORGANISM		#formal_name Mus musculus #common_name house mouse	
DATE		30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change	
ACCESSIONS		18-Oct-1996	
REFERENCE		B38634; A40254; S54816	
AUTHORS		A38634	
JOURNAL		Lewis, M.; Tartaglia, L.A.; Lee, A.; Bennett, G.L.; Rice,	
TITLE		G.C.; Wong, G.H.W.; Chen, E.Y.; Goeddel, D.V.	
GENETICS		Proc. Natl. Acad. Sci. U.S.A. (1991) 88:2830-2834	
SUMMARY		Cloning and expression of cDNAs for two distinct murine tumor	
Query Match		necrosis factor receptors demonstrate one receptor is	
Best Local Similarity	12.4%; Score 377; DB 14; Length 459;		
Matches	66; Conservative 21; Mismatches 61; Indels 11; Gaps 7;		
Db	37	gmccakcpbggyrhfnkstdcvadcaeamtyqwngfriclcasscsdqetrac	96
Oy	38	QLLDCKPPIYLKQHCTARKWTVCACPDPHYTDSMHTSDECLCYSPVCKELQYVKEC	97
Db	97	tkggnrvacaagaycalchsgscqcmrlskcpgfigvaasrpbnvgvlckacaptlf	156
Oy	98	NRTNRNVCECKEGRY--LEIEF--CLKH-R-S-CPEGFEVWAGTRPNTVCKRPDDEF	150
Db	157	sdtstidvcprhlcsi--laip--gnastdavcapes	191
Oy	151	SNETSSKAPCRKHNTCSVFGLLTQKNATHDNICGS	189
RESULT	3		
ENTRY		B38634	

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REFERENCE      A40254
#authors      Goodwin, R.G.; Anderson, D.; Jerzy, R.; Davis, T.; Brannan,
#journal      C.T.; Copeland, N.G.; Jenkins, N.A.; Smith, C.A.
#title        Mol. Cell. Biol. (1991) 11:3020-3026
#cross-references MIMD:91246168
#accession    A40254
#molecule_type mRNA
#residues     1-474 #label GOO
#cross-references GB:M60469
REFERENCE      S54816
#authors      Kisonernigis, M.; Fellowes, R.; Feldmann, M.; Chernajovsky,
#submission   Y.
#description   Submitted to the EMBL Data Library, May 1995
#accession    S54816
#molecule_type DNA
#residues     1-22 #label KIS
#cross-references EMBL:X87128
CLASSIFICATION #superfamily tumor necrosis factor receptor type 2; NGF
                receptor repeat homology

FEATURE
1-22           #domain signal sequence #status predicted #label SIG\
23-44          #product tumor necrosis factor receptor type 2 #status
40-77          predicted #label MAT\
79-120         #domain NGF receptor repeat homology #label NG1\
166-203        #domain NGF receptor repeat homology #label NG2\
SUMMARY        #length 474 #molecular-weight 50319 #checksum 7767

Query Match      12.4%; Score 375; DB 6; Length 474;
Best Local Similarity 41.5%; Pred. No.3,24e-43;
Matches 66; Conservative 21; Mismatches 61; Indels 11; Gaps 7;

Db 52 qmccakppqgykhfnktsdvcdaeamtyqwnqftrclscsscttdqyelrac 111
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||
OY 38 QLLCDKCPGTYLKQHCITAKTKVCAPCPDHYTDSMHSDECLVCSPYKELQVXQEC 97
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||
Db 112 tkgnrycaceagrycalkhsgscrgcmrlsacgpgfgyasrpnngvnlckaapptf 171
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||
OY 98 NRTINRVCCKEGRY--LEIEF--CLKH-R-S-CPPGFGVQAGTPERNYCKRCPDGFF 150
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||
Db 172 sdtstsvdcvrphricsi--laip--gnastdvcapes 206
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||
151 SNETSSKAPCKRKHNCVSFGLLITOKGNATHDNICGNS 189
   1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: ||||| 1: |||||

RESULT 4
ENTRY      A60771
TITLE      B-cell activation protein CD40 precursor - human
ALTERNATE_NAMES B-cell surface antigen Bp50
ORGANISM   Homo sapiens #common_name man
DATE       03-Jun-1993 #sequence_revisions 03-Feb-1994 #text_change
          06-Sep-1996
ACCESSIONS S04460; A60771
REFERENCE   S04460
#authors    Stamenkovic, I.; Clark, E.A.; Seed, B.
#journal    EMBO J. (1989) 8:1403-1410
#title      A B-lymphocyte activation molecule related to the nerve
            growth factor receptor and induced by cytokines in
            carcinomas.
#cross-references MIMD:89356608
#accession  S04460
#molecule_type mRNA
#residues   1-277 #label STA
#cross-references EMBL:X60592
REFERENCE   A60771
#authors    Biresch-Andersen, S.; Paulie, S.; Kono, H.; Nika, H.;
            Aspenstroem, P.; Perlman, P.
#journal    J. Immunol. (1989) 142:362-367

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#title      Biochemical characteristics and partial amino acid sequence
            Of the receptor-like human B cell and carcinoma antigen
            CDw40.
#accession  A60771
##molecule_type protein
##residues  21-50 ##label BRA
##experimental_source Burkitt lymphoma cell line Raji
GENETICS
#gene       GDB:CD40
##cross-references GDB:215268
#map_position 20q12-20q13.2
KEYWORDS    B-cell; glycoprotein; phosphoprotein; transmembrane protein
FEATURE
1-20
21-277
21-193      #domain signal sequence #status predicted #label SIG\
194-215     #product B-cell activation protein CD40 #status
216-277     experimental #label MAT\
153,180     #domain extracellular #status predicted #label EXT\
            #domain transmembrane #status predicted #label TM\
            #domain intracellular #status predicted #label CY\
            #binding_site carbohydrate (Asn) (covalent) #status
            predicted
SUMMARY
#length 277 #molecular_weight 30619 #checksum 6261

Query Match      10.0%; Score 303; DB 13; Length 277;
Best Local Similarity 36.8%; Pred. No. 6,84e-31;
Matches 56; Conservative 21; Mismatches 67; Indels 8; Gaps 7.

Db
38 csllpggklyvscdtefeteclpcgeseftdwrethcghklycdpn-1gfr-vvqkg 95
41 CDKCPFGYILQHCTAKKITYCACPDRHYTDSNHTDEC-L--YCSFVCKELQYVQEC 97
Oy 96 tseitltctceegwhtcseacscvllhrscspgfgvkqatlygsadlceppvygf 155
98 NRTNHRVCEKEGGR-L-EI-EFCLTKRHSCEPGRGVQAGPERNTYCKRCPDGFNSMT 154
Db 156 safekhpwtscetkdlvvgagatnktdvcg 187
Oy 155 SSKAPCRKHNCVSFGLLTQGNATHDNICS 186

RESULT 5
ENTRY    A46515 #type complete
TITLE    B cell-associated surface molecule CD40 - mouse
ORGANISM #formal_name Mus musculus #common_name house mouse
DATE     18-Jun-1993 #sequence_revision 18-Nov-1994 #text_change
         03-Mar-1995
ACCESSIONS
REFERENCE A46515
#authors  Grimaldi, J.C.; Torres, R.; Kozak, C.A.; Chang, R.; Clark,
         E.A.; Howard, M.; Cockayne, D.A.
#journal  J. Immunol. (1992) 149:3921-3926
#title    Genomic structure and chromosomal mapping of the murine CD40
         gene.
#cross-references MIMD:93094586
#accession A46515
#status preliminary; not compared with conceptual translation
##molecule_type nucleic acid
##residues 1-289 ##label GRI
##cross-references NCBIP:120357
##experimental_source BALB/c, liver
#note     sequence extracted from NCBI backbone
SUMMARY   #length 289 #molecular_weight 32111 #checksum 579

Query Match      9.7%; Score 294; DB 14; Length 289;
Best Local Similarity 38.8%; Pred. No. 2.21e-29;
Matches 59; Conservative 20; Mismatches 65; Indels 8; Gaps 6;

Db 38 cdleqgsriltshctalektqchpdsgefsaqvareilchqhncepn-vglr-vkqg 95
Oy 41 CDKCPFGYILQHCTAKKITYCACPDRHYTDSNHTDEC-LV--CSFVCKELQYVQEC 97
Db 96 taesdtvctckegghnctscdeacaghtpctlpgfyvmematetdtvchpcpvygf 155

```

Qy 98 NTHNRVCECKEGRY-L--EIFECLKHRSCEPPGFVQAGTPERNYCKRCPDGFSSNET 154  
Db 156 slfckypwtscedknlewlqkqtsqtnvlg 187  
Qy 155 SSKAPCRKHTNCSVFGLLITOKGNATHDNICS 186

RESULT 6  
ENTRY A46476 #type complete  
TITLE CD40 - mouse  
ORGANISM #formal\_name Mus musculus #common\_name mouse  
DATE 18-Jun-1993 #sequence\_revision 18-Nov-1994 #text\_change 18-Nov-1994

ACCESSIONS A46476  
REFERENCE A46476  
#authors Torres, R.M.; Clark, E.A.  
#journal J. Immunol. (1992) 148:620-626  
#title Differential increase of an alternatively polyadenylated mRNA species of murine CD40 upon B lymphocyte activation.  
#cross-references MUID:92105763

##status preliminary  
##molecule\_type mRNA  
##residues 1-305 #label TOR  
#cross-references NCBI:75206; NCBI:75207  
#note Sequence extracted from NCBI backbone

SUMMARY #length 305 #molecular-weight 33617 #checksum 5203

Query Match 9.7%; Score 294; DB 14; Length 305;  
Best Local Similarity 38.8%; Pred. No. 2.21e-29;  
Matches 59; Conservative 20; Mismatches 65; Indels 8; Gaps 6;

Db 38 cdicppgrrlshcraletqscpdsgefsagwrelrchqhncepn-qglr-vkxeg 95  
Qy 41 CDKCPGGTYLKQHCYAKKTYCAPDPHYTDSWHTSDECL-ly--CSPVCKELQYVQKQEC 97

Db 96 taesdtvckegqhtskdeacacqhpcldpfgvmematetdvtchpcpvgffsngs 155  
Qy 98 NTHNRVCECKEGRY-L--EIFECLKHRSCEPPGFVQAGTPERNYCKRCPDGFSSNET 154

Db 156 slfckypwtscedknlewlqkqtsqtnvlg 187  
Qy 155 SSKAPCRKHTNCSVFGLLITOKGNATHDNICS 186

RESULT 7  
ENTRY GQVZML #type complete  
TITLE T2 protein - myxoma virus (strain Lausanne)  
ORGANISM #formal\_name myxoma virus  
DATE 31-Dec-1992 #sequence\_revision 31-Dec-1992 #text\_change 26-Apr-1996

ACCESSIONS A40566  
REFERENCE A40566  
#authors Upton, C.; Macen, J.L.; Schreiber, M.; McFadden, G.  
#journal Virology (1991) 184:370-382  
#title Myxoma virus expresses a secreted protein with homology to the tumor necrosis factor receptor gene family that contributes to viral virulence.  
#cross-references MUID:91335768

##molecule\_type DNA  
##residues 1-326 #label UPT  
#cross-references GB:M37976  
CLASSIFICATION #superfamily myxoma virus T2 protein; NGF receptor repeat homology

KEYWORDS glycoprotein  
FEATURE 64-105 #domain NGF receptor repeat homology #label NG2\  
106-147 #domain NGF receptor repeat homology #label NG3\  
66,161,205,238 #binding\_site carbohydrate (asn) (covalent) #status predicted

SUMMARY #length 326 #molecular-weight 35208 #checksum 9255

Query Match 8.9%; Score 269; DB 2; Length 326;  
Best Local Similarity 33.8%; Pred. No. 3.14e-25;  
Matches 47; Conservative 25; Mismatches 58; Indels 9; Gaps 8;

Db 40 ctscppgyasrlqggsdvtcspcknetftastinhapacvscgrtqghlseqsdc 99  
Qy 41 CDKCPGGTYLKQHCYAKKTYCAPDPHYTDSWHTSDECLYCSPVCKELQYVQKQECNRT 100

Db 100 rdryocdsagnycllkqgggericcaprtkcpagysv-ghttrgdltctkcpvtydsav 158  
Qy 101 HNRVCECKEGRY--LE-IEFC-L-KHRS-CPPGFVQAGTPERNYCKRCPDGFSSNET 154

Db 159 sstetctssfnysvfevl 177  
Qy 155 SSKAPCRKHTNC-SV-FGL 171

RESULT 8  
ENTRY B43692 #type complete  
TITLE T2 protein - rabbit fibroma virus  
ORGANISM #formal\_name rabbit fibroma virus; Shope fibroma virus  
DATE 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 26-Apr-1996

ACCESSIONS B43692  
REFERENCE B43692  
#authors Upton, C.; Delange, A.M.; McFadden, G.  
#journal Virology (1987) 160:20-30  
#title Tumorigenic poxviruses: genomic organization and DNA sequence of the telomeric region of the Shope fibroma virus genome.  
#accession B43692  
##status preliminary  
##molecule\_type DNA  
##residues 1-325 #label UPT  
#cross-references GB:M17433

CLASSIFICATION #superfamily NGF receptor repeat homology  
FEATURE 64-105 #domain NGF receptor repeat homology #label NG2\  
106-147 #domain NGF receptor repeat homology #label NG3\  
SUMMARY #length 325 #molecular-weight 35132 #checksum 4629

Query Match 8.6%; Score 260; DB 6; Length 325;  
Best Local Similarity 30.5%; Pred. No. 9.43e-24;  
Matches 51; Conservative 31; Mismatches 77; Indels 8; Gaps 5;

Db 40 caschpgyasrlqggsdvtcspcknetftastinhapacvscgrtqghlseqsdc 99  
Qy 41 CDKCPGGTYLKQHCYAKKTYCAPDPHYTDSWHTSDECLYCSPVCKELQYVQKQECNRT 100

Db 100 hdyvncstgnycllkqgggericcaprtkcpagysv-ghttrgdltctkcpvtyds 158  
Qy 101 HNRVCECKEGRY-L--EIE--FCLKHRSCEPPGFVQAGTPERNYCKRCPDGFSSNET 154

Db 159 sptercgtsfnysvfnlypnetcttt-aghnevktkfevtl 204  
Qy 155 SSKAPCRKHTNCSVFGLLITOKGNATHDNICSGNSESTOKGIDVTL 201

RESULT 9  
ENTRY I54182 #type complete  
ENTRY tumor necrosis factor receptor 2-related protein - human  
TITLE #formal\_name Homo sapiens #common\_name man  
ORGANISM DATE 24-May-1996 #sequence\_revision 24-May-1996 #text\_change 24-May-1996

ACCESSIONS I54182  
REFERENCE I54182  
#authors Baens, M.; Chafanet, M.; Cassiman, J.J.; Van den Berghe, H.; Maynen, P.  
#journal Genomics (1993) 16:214-218  
#title Construction and evaluation of a hncDNA library of human 12p transcribed sequences derived from a somatic cell hybrid.  
#cross-references MUID:9252381  
#accession I54182  
##status preliminary; translated from GB/EMBL/DBJ



```

Db      168 -chagffiresccpscshckkneec 191
      | ||| | : : : : : | : | : |
Oy      144 RCPDGFSSNETSSKA-P-CRRHTNC 166

RESULT      13
ENTRY       GOMST1
TITLE       #type complete
ALTERNATE_NAMES tumor necrosis factor receptor type 1 precursor - mouse
ORGANISM    tumor necrosis factor receptor, 55k
DATE        #format_name Mus musculus #common_name house mouse
            30-Jun-1992 #sequence.revision 30-Jun-1992 #text_change
            18-Oct-1996
            A38634; BA0254; S16677; S19021; I54532
REFERENCE   A38634
AUTHORS     Lewis, M.; Tartaglia, L.A.; Lee, A.; Bennett, G.L.; Rice,
            G.C.; Wong, G.H.W.; Chen, E.Y.; Goeddel, D.V.;
            Proc. Natl. Acad. Sci. U.S.A. (1991) 88:2830-2834
JOURNAL     Cloning and expression of cDNAs for two distinct murine tumor
            necrosis factor receptors demonstrate one receptor is
            species specific.
            #cross-references MIMD:91187885
#accession  A38634
#molecule_type mRNA
#residues   1-454 ##label LEW
#cross-references GB:M60468
REFERENCE   A40254
AUTHORS     Goodwin, R.G.; Anderson, D.; Jerry, R.; Davis, T.; Brannan,
            C.T.; Copeland, N.G.; Jenkins, N.A.; Smith, C.A.;
            Mol. Cell. Biol. (1991) 11:3020-3026
JOURNAL     Molecular cloning and expression of the type 1 and type 2
            murine receptors for tumor necrosis factor.
            #cross-references MIMD:91246168
#accession  BA0254
#molecule_type mRNA
#residues   1-454 ##label G02
#cross-references GB:M60468
REFERENCE   S16677
AUTHORS     Barrett, K.; Taylor-Fishwick, D.A.; Cope, A.P.; Kissmerghis,
            A.M.; Gray, P.W.; Feldmann, M.; Foxwell, B.M.J.;
            Eur. J. Immunol. (1991) 21:1649-1656
JOURNAL     Cloning, expression and cross-linking analysis of the murine
            p35 tumor necrosis factor receptor.
            #cross-references MIMD:91285014
#accession  S16677
#molecule_type mRNA
#residues   1-454 ##label BAR
#cross-references EMBL:X59238
REFERENCE   S19021
AUTHORS     Rothe, J.G.; Brockhaus, M.; Gentz, R.; Lesslauer, W.;
            Immunogenetics (1991) 34:338-340
JOURNAL     Molecular cloning and expression of the mouse Tnf receptor
            type b.
            #cross-references MIMD:92039815
#accession  S19021
#molecule_type mRNA
#residues   1-454 ##label ROT
#cross-references EMBL:X57796
REFERENCE   I54532
AUTHORS     Bebo, B.F.;
            Immunogenetics (1994) 39:450-451
JOURNAL     Nucleotide sequence of the TNF type I receptor from a mouse
            endotheiloma cell line.
            #cross-references MIMD:94245292
#accession  I54532
#status     translated from GB/EMBL/DBD1
#molecule_type mRNA
#residues   1-454 ##label RES
#cross-references GB:I26349; NID:g430732; CDS_PID:g430733
COMMENT     This protein is one of two distantly related receptors for both
            TNF-alpha (cachectin) and TNF-beta (lymphotoxin).
            #superfamily tumor necrosis factor receptor type 1; NGF
            receptor repeat homology

```

```

KEYWORDS      duplication; glycoprotein; receptor; transmembrane protein
FEATURE
1-29          #domain signal sequence #status predicted #label SIG\
30-54        #product tumor necrosis factor receptor type 1 #status
              predicted #label MAT\
30-212       #domain extracellular #status predicted #label EXT\
44-82        #domain NGF receptor repeat homology #label NG1\
84-126       #domain NGF receptor repeat homology #label NG2\
127-166     #domain NGF receptor repeat homology #label NG3\
168-204     #domain NGF receptor repeat homology #label NG4\
212-234     #domain transmembrane #status predicted #label MEM\
235-461     #domain intracellular #status predicted #label INT\
54,151,201  #length 454 #molecular-weight 50129 #checksum 4839

SUMMARY
Query Match      7.3%; Score 221; DB 2; Length 454;
Best Local Similarity 33.1%; Pred. No. 1,776-17;
Matches 48; Conservative 21; Mismatches 65; Indels 11; Gaps 9;

Db 49 yvahnksioctkhbkytvsdgsprgdtvreeekyftfssqnylgqlsckrtcke 108
      |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Oy 31 YDEETSHQLCDKCPETTYLKQHTA-KWTVCAPCPDHRYDTSWHTSPCLYCSVCKE 89
      :|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Db 109 msqyelspcqadkxdtvcskengfgyrlsethfcydcscpfng-tvrlpcketqntva 167
      :|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Oy 90 LQYK-GEQNRNTHRVCEKEG---RL-ETEE-CLKHNSCPGFEVQAQPERNTVCK 143
      :|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Db 168 -chagfflireecvpsckhneec 191
      ||||::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Oy 144 RCPDGFESNETSKA-P-CRKHTNC 166

RESULT 14
ENTRY      GQRTT1      #type complete
TITLE      tumor necrosis factor receptor type 1 precursor - rat
COMMENT    tumor necrosis factor binding protein 1 (TNF blocking factor
ORGANISM   #formal_name Rattus norvegicus #common_name Norway rat
DATE       30-Jun-1992 #sequence_revision 07-Oct-1994 #text_change
              05-Apr-1995

ACCESSIONS B36555
REFERENCE  A36555
          Himmler, A.; Maurer-Fogy, I.; Kroenke, M.; Scheurich, P.;
          Pfizenmaier, K.; Lantiz, M.; Olsson, I.; Hauptmann, R.;
          Strizoman, C.; Adolf, G. R.
          DNA Cell Biol. (1990) 9:705-715
          Molecular cloning and expression of human and rat tumor
          necrosis factor receptor chain (p60) and its soluble
          derivative, tumor necrosis factor-binding protein.
          #cross-references MIMD:91090841
          #accession B36555

          ##molecule_type mRNA
          ##residues 1-461 ##label HIM
          ##cross-references GB:M63122

COMMENT    This protein is one of two known receptors for both TNF-alpha
(cachectin) and TNF-beta (lymphotoxin).
CLASSIFICATION
#superfamily tumor necrosis factor receptor type 1; NGF
receptor repeat homology
duplication; glycoprotein; receptor; transmembrane protein

KEYWORDS
FEATURE
1-29          #domain signal sequence #status predicted #label SIG\
30-461       #product tumor necrosis factor receptor type 1 #status
              predicted #label MAT\
30-211       #domain extracellular #status predicted #label EXT\
30-201       #product tumor necrosis factor binding protein #status
              predicted #label TBP\
44-82        #domain NGF receptor repeat homology #label NG1\
84-126       #domain NGF receptor repeat homology #label NG2\
127-167     #domain NGF receptor repeat homology #label NG3\
168-204     #domain NGF receptor repeat homology #label NG4\
212-234     #domain transmembrane #status predicted #label MEM\
235-461     #domain intracellular #status predicted #label INT\
54,151,201  #binding site carbohydrate (Asn) (covalent) #status
              predicted
#length 461 #molecular-weight 50969 #checksum 1617
SUMMARY

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```
262-416 #domain intracellular #status predicted #label INT\
52 #binding_site carbohydrate (Asn) (covalent) #status
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Search completed: Wed Aug 20 09:43:54 1997  
Job time : 99 secs.

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